

Abstract

Hybrid optical data carrier having a modified CD layer

5 The invention relates to an optical data carrier which combines a CD layer with at least one further format, such as a DVD layer for example. If a hybrid data carrier of this kind is to be produced in a thickness of less than 1.7 mm, and preferably in a thickness of 1.5 mm or less, then, seen from the surface which is to be read from, the CD layer will normally be situated at a depth of considerably less than 1.1 mm, and the CD substrate therefore has to
10 be thinned down. The quality of the reading signals obtained is increased by increasing the length of the optically readable structures of the CD layer in comparison with the values which are usual in this case. Because of the difficulties which certain CD players have in focussing when the substrates are thin, the refractive index of the disc material used is reduced from the figure for polycarbonate, at least in the case of the CD substrate, the
15 recommended range being between 1.40 and 1.55. The compatibility of the CD layer of a hybrid disc according to the invention with different players may be further increased by widening its readable structures in comparison with normal values and thus by making them more than 500 nm wide.